

Gut Microbiome Composition and Its Impact on Obesity in Populations with Low Breastfeeding Rates

By: Casey M. Hobbs

Introduction:

The obesity epidemic is one that has deeply entrenched itself into every facet of society and encompasses all age groups. Of interest, children are falling victim to the wrath of obesity and not only impacts children in the present, but if left untreated, will set the stage for a lifetime plagued with chronic conditions, diseases and early death. Research indicates that breastfeeding may protect from the development of pediatric obesity.

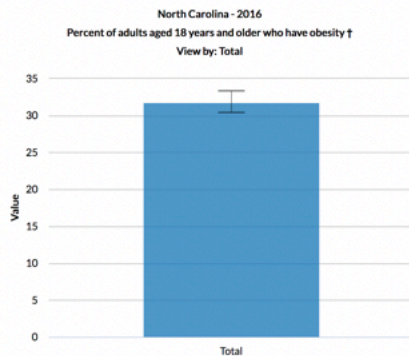


Figure 1. Adult Obesity in NC

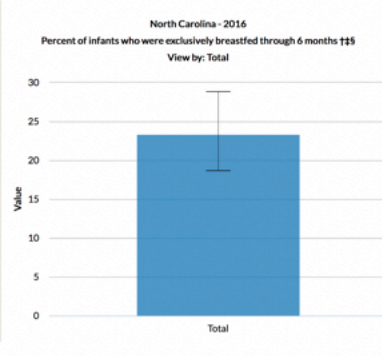


Figure 2. Exclusively Breastfed

Key Points:

- Obesity rates are growing
- Research establishes a link between altered gut microbiome and obesity
- Breastfeeding may develop a gut microbiome capable of protecting against obesity
- Obesity rates are growing while breastfeeding rates remain low in rural populations when compared to urban populations

Discussion:

Exhaustive measures are necessary to end the growing obesity epidemic. Identifying a modifiable factor in the development of obesity, such as the implementation and continuation of breastfeeding at birth, is crucial for the protection of the pediatric population against obesity in adulthood. Education and support regarding the impacts breastfeeding in at-risk rural populations could lead to a decline of obesity.